

# IMPROVING ENTREPRENEURIAL SKILLS IN PORTUGAL HIGHER EDUCATION - A CASE STUDY IN ALTO MINHO REGION

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## RESUMO

O tema empreendedorismo é identificado como uma alavanca de mudança com o intuito de aumentar o crescimento económico e a transformação da sociedade. Em particular, deve ser usado como uma estratégia de contrarresposta à atual crise e como um meio para combater a apatia, a inércia e a falta de iniciativa empresarial.

Sabe-se que a educação para o empreendedorismo aumenta as intenções individuais para iniciar um negócio. O maior desafio no Ensino Superior é o romper com os métodos tradicionais de estudos, onde os alunos e suas famílias pensam na criação de novos funcionários para outras empresas e não para criar um novo empregador. A educação para o empreendedorismo visa produzir graduados com um conjunto de competências e uma mentalidade empreendedora, cujo objetivo final é desenvolver ideias originais que darão resposta a carências e necessidades identificadas no mercado.

Na Escola Superior de Ciências Empresariais do Instituto Politécnico de Viana do Castelo, um conjunto integrado de projetos e atividades estão a tentar contribuir para a melhoria das competências empresariais da região: desde oficinas abertas à comunidade, a projetos individuais dos alunos para preparar uma empresa *startup*, têm sido várias as contribuições para aumentar as novas capacidades dos alunos e melhorar a sua identidade empresarial. Alguns dos objetivos destas iniciativas integradas referem-se a: desenvolver a capacidade de aplicar conceitos e teorias abordados durante o curso de uma forma integrada, proporcionando-lhes a oportunidade de confrontar as teorias estudadas com as práticas profissionais existentes destinadas a experiência de consolidação e desempenho profissional; preencher lacunas específicas em áreas consideradas relevantes para o progresso e desenvolvimento da sua futura atividade profissional; fornecer uma visão prática da realidade empresarial através da formulação de ideias com potencial para a preparação de planos de negócios e marketing; fornecer aos estudantes ferramentas de execução, acompanhamento e gestão de negócios adequadas; incentivar o espírito empresarial e uma cultura ética e pró-ativa através da implementação de projetos que conduzam à solução de problemas e melhorias em processos organizacionais.

**Palavras-chave:** *competências empresariais; educação para o empreendedorismo; Ensino Superior; identidade empresarial; Leaders for the Future.*

## ABSTRACT

The entrepreneurship topic is identified as a switch gear to enhance the economic growth and as an important driver for the society transformation. In particular, it should be used as a counter response strategy to the current crisis and as a means to combat apathy, inertia, and the lack of entrepreneurial initiative.

It is known that entrepreneurship education increase self-reported intentions to begin a business. The biggest challenge in higher education is the breaking of traditional studies methods, where students and their families think in create new employees for other companies and not to create a new employer. Entrepreneurship education aims to produce graduates with a set of skills and an entrepreneurial mindset, in order to come up with original ideas in response to identified market shortfalls and needs.

At Business School of the Polytechnic Institute of Viana do Castelo, an integrated set of projects and activities are trying to contribute to the improvement of entrepreneurial skills of the region: since workshops open to community, to individual projects of students to prepare a startup company, they have been contribute to enhance new capacities and a better entrepreneurial identity of students. Some of the objectives of these integrated initiatives refer to: develop the ability to apply concepts and theories covered during the graduation in an integrated manner and providing them the opportunity to confront the theories studied with existing professional practices aimed at consolidation experience and professional performance; fill specific gaps in areas considered relevant to the progression and development of their future professional activity; provide a practical view of business reality through the ideas with potential formulation for the preparation of business plans and marketing; provide students tools for implementation, monitoring and proper business management; encourage the entrepreneurial spirit and an ethical culture and proactive by implementing projects that lead to the solution of problems and improvements of organizational processes.

**Keywords:** *entrepreneurship education; entrepreneurial identity; entrepreneurial skills; Higher Education; Leaders for the Future.*

## 1. Introduction

Northern Portugal Region, and specially its Alto Minho Region, is facing a real problem: the number of young graduate unemployed people is increasing rapidly. Accordingly to PORDATA (<http://www.pordata.pt/>), in the year 1997 the region had 366 young unemployed graduated people and 1584 in 2015, an increase of more than 400% in less than ten years. This is a result of a very deficient economic development.

Small and Medium Enterprises (SMEs) are considered to be a major contributor in the economic development of any region. The Lisbon strategy (Rodriguez, Waderdam and Triomphe, 2010) defines how important is to foster economic growth and employment. Based in such strategy, the Alto Minho Region, and the country, need to promote and train entrepreneurial mindset of young people, encourage innovative business start-ups, and allow a friendlier culture to entrepreneurship.

Higher Education (HE) has a major role in promoting more entrepreneurial attitudes and behaviours. The importance of entrepreneurship education has even been recognized by the United Nations Conference on Trade and Development as an important item in the promotion of the development of countries (UNCTAD Secretariat, 2011).

According to Alvarez and Busenitz (2004), if HE do not offer entrepreneurship education, students will be less likely to become entrepreneurs. In fact, Peterman and Kennedy (2003) found evidence that students' entrepreneurial experiences during their education awaken or strengthen their desire to create new businesses. Besides HE can raise consciousness and interest in exploring alternative forms of work and entrepreneurial activities (Galloway *et al.*, 2005), developing creative thinking, innovative capacity, and improvement in self-esteem and responsibility (Heinonen, Kovalainen and Pukkinen, 2006).

In this context, the Business School (ESCE) of the Polytechnic Institute of Viana do Castelo (IPVC) developed a pioneer initiative in Portugal, called “Leaders For The Future”, which has as its genesis the involvement of all students, who enter in their undergraduate courses, in developing a three year duration individual project that ends with the creation and implementation of a business. Thus, its goal is to provide the market with qualified and motivated young people that develop their own businesses and contribute to the development of the regions where they will be implemented, with a natural emphasis on the Alto Minho Region. With such a pedagogical project, ESCE-IPVC aims to reduce the perennial problem that our nation faces in terms of unemployment of qualified young people with academic background. This paper presents how the project is organized in the Business School, how the necessary work is included in the curricula of the undergraduate courses and some of the results obtained until now.

The rest of this paper is organized as follows. Next section, section 2, briefly presents some theoretical background. Then, section 3 describes how the project is implemented in the Business School. Section 4, presents some results. Finally, section 5 presents some conclusions and possibilities for future work are highlighted.

## **2 Theoretical Background**

### *2.1 What is Entrepreneurship?*

Entrepreneurship has been part of our vocabulary for many times. But what is really meant when we refer entrepreneurship? The first concept known concept of goes back to 1700s, and its meaning has been continuously evolving since then. Many simply refer it with starting one’s own business. However, most experts believe it is more than that.

To some economists, the entrepreneur is one who is willing to bear the risk of a new venture if there is a significant chance for profit. On the other side, some emphasize the entrepreneur’s role as an

innovator who markets his innovation. Still other experts refer that someone is entrepreneur when he or she develops/updates goods or processes that the market demands and are not currently being supplied.

More recently, one economist called Joseph Schumpeter (2009) investigated how the entrepreneur's will for innovation and betterment propels upheaval and change. Schumpeter viewed entrepreneurship as a force of "creative destruction."

Peter Drucker (2015) took this idea a step ahead, defining an entrepreneur as someone who keeps searching for change, responds to it, and exploits change as an opportunity.

What most of the experts agree, today, is that entrepreneurship is a necessary drive force for stimulating economic growth and employment opportunities in all societies. In the developing world, successful small businesses are the primary foundations of job creation, income growth, and poverty reduction.

## *2.2 Entrepreneurship in Higher Education*

Whether entrepreneurship can be taught, has consistently been a literature subject (examples of this are Fiet (2001) and Sexton and Upton (1987)). Some studies also refer that general education has a strong positive influence on entrepreneurship and success, even stronger than that of experience (Robinson and Sexton, 1994). More recent research has underlined the importance of entrepreneurship education, referring how graduates with entrepreneurship education are more likely to start new businesses and have stronger entrepreneurial intentions than the general graduate (Kolvereid and Moen, 1997).

Literature also shows that exist teachable and unteachable aspects of entrepreneurship (Dana, 2001), thus, it is possible to consider that entrepreneurship practice consists of both teachable and unteachable aspects. The teachable can again be separated into aspects teachable through traditional scholastic methods and aspects learned through experience.

Politis (2005) demonstrates that it can be distinguished between entrepreneurial experience and entrepreneurial knowledge. Earlier, Kolb (1984) showed that experimental learning consists of acquisition and transformation, which is in line with the previous author framework for the entrepreneurial learning process.

Traditionally entrepreneurship education has had an individual focus but in recent years this has been moving to a more action oriented pedagogical approach. This change is based on what appears as consensus in the entrepreneurial education research, namely that entrepreneurship is best taught by acts of entrepreneurship and experimental pedagogical tools (Haines, 1988; Hills, 1988). A mixed strategy combining individual focus with training in business schools was suggested by Laukkanen (2000). His business model mentions that students should be operationally involved in real business contexts.

Responding to external pressures, HE has started to change the way they operate: there is an increasing interest in co-operating with businesses, and sometimes, the proper industry and other companies offers private funding to promote research in HE institutions (Clark 2004).

Although the stimulation of intellectual activity in students through transmission of theoretical knowledge and the advancement of knowledge through research are still important, other aspects are gaining importance such as provision for practical skills and applied knowledge and the direct and indirect contribution of universities to knowledge economies.

### *2.3 Entrepreneurial skills*

Entrepreneurial education is crucial for the improvement of entrepreneurial attitudes and behaviours. Transversal skills such as creativity, spirit of initiative and entrepreneurship will allow those who go through entrepreneurial education programs to develop potential to think creatively and innovate, to develop proactivity, autonomy, ability to manage and track a project and pursue getting results. All

these skills will conduct to better meet increasing needs for adaptability and flexibility on labour market, in an economy characterized by globalization, uncertainty and dynamic changes.

The objectives of entrepreneurship education are related to improving entrepreneurial skills of young people; stimulate creativity and self-confidence, encouraging innovative startups, increasing the role of entrepreneurs in society and the economy.

According to the Quality Agency for Higher Education in UK (2012), four key stages of developing entrepreneurial effectiveness should be considered:

- a) *Enterprise awareness* – it is acquired when through learning and intellectual development, they develop knowledge, understanding and awareness of enterprising and entrepreneurial activities and their significance in relation to the wider world; examples are the understanding of the scale and role of small firms in an industry, and the comprehension of the value of ideas and their protection through intellectual property management strategies.
- b) *Developing an entrepreneurial mindset* – it is encouraged the development of self-awareness of their own enterprising and entrepreneurial qualities, as well as the motivation and self-discipline to apply these flexibly in different contexts to achieve desired results. An entrepreneurial mindset includes: aspects of personality and social identity; personal ambition and goals; personal confidence and resilience; self-discipline and personal organisation; tolerance of uncertainty, ambiguity, risk, and failure; personal values such as ethical, social and environmental awareness.
- c) *Developing entrepreneurial capability* – prior experience and learning can help students to develop a range of enterprising and related practical, social and conceptual skills. These in turn can be used to develop opportunities and achieve results.
- d) *Entrepreneurial effectiveness* – is achieved when the student moves toward completion of their undergraduate studies and prepares

for the transition into work, self-employment, further study, or other options. Their learning is increasingly self-directed, pursuing not only academic but also career and broader life goals.

It is then important to teach entrepreneurship in higher education as a continuous process. In Portugal, entrepreneurship is taught in almost undergraduate courses, but only during one semester. It is important to teach entrepreneurship, during all undergraduate courses semesters and this reinforces the relevance of this work.

### **3 Improving entrepreneurial skills in the alto minho region: Leaders for the future**

At ESCE-IPVC, in the year of 2012, a problem arose “Currently the teaching of entrepreneurship is not yet sufficiently integrated in higher education institutions” curricula and it is also questionable whether business schools are the most appropriate place to teach entrepreneurship: innovative and viable business ideas are more likely to arise from technical, scientific and creative studies. Another challenge was to fight the pre-concept, traditionally induced in the minds of our students, and also of their respective families, that we are people with low entrepreneurship aptitudes. Thus, the real challenge was to build an inter-disciplinary approach, making entrepreneurship education accessible to all students, creating teams for the development and exploitation of business ideas.

To overcome these challenges and problems was created, in 2012, the “The Leaders for the Future” project. This is an innovative entrepreneurship project in HE in Portugal that aims to develop and promote the students entrepreneurial skills. The main goal of the project is the incubation of the business at our facilities with technical and logistical support of different experts and stakeholders and also the presentation of the business ideas to potential investors and financiers.

This is an individual project and is part of the training provided in the undergraduate course curricula units. A large range of the



course units of each undergraduate degree participate in developing a business project and a business model. This project begins with the development of a business idea, during the first academic year, and ends with the completion of a business plan in the third school year. The business plan uses the model recommended by IAPMEI (<http://www.iapmei.pt/>). IAPMEI also participates in the initial project phase (1st year, 1st semester of each undergraduate course) supporting all students in the generation and validation of the individual business idea. The project is continuously developed over the three years of each degree. By the end of the first semester of the third year, the student must complete all tasks under its project, while during the second semester (completion of degree) the students define procedures for its optimization and its implementation.

Each individual project is accompanied and supported by a team of professors, ensuring the final quality and robustness of the projects to be implemented. There is also a variety of partner organizations that support the project development: banks, incubators, trade associations, among others. While this is an innovative initiative, it is also important that all students understand its relevance in their academic and professional career and also make them responsible for its implementation. This is why is so important full support of all teachers, and all partner organizations involved directly or indirectly in the project.

The implementation of such an entrepreneurship project allows also to achieve the following pedagogical goals:

- a. fill specific gaps in areas considered relevant to the progression and development of their future professional activity;
- b. provide a practical view of business reality through the ideas with potential formulation for the preparation of business plans and marketing;
- c. provide students tools for implementation, monitoring and proper business management;

- d. encourage the entrepreneurial spirit and an ethical and proactive culture by implementing projects that lead to the solution of problems and improvements of organizational processes;
- e. generate interest in research as a mean to solve problems.

The development and implementation of the “Leaders For The Future” project allows also to:

- a. develop individual and team working methods;
- b. increase the ability to work under time and volume of work pressure;
- c. encourage the improvement of oral and written expression;
- d. improve the capacity of self-criticism and analysis;
- e. raise awareness among students about the importance of competitiveness and pro-activity in the business environment;
- f. encourage communication in international business languages;
- g. contribute, wherever possible, to promote the Alto Minho and its resources;
- h. lean the relationships between students and various organizations, professional orders, institutions and other entities, which will occupy a central role in the development of their performance professional activity.

#### **4 Results**

In the end of 2015, there were more than 100 students developing their individual projects and it is expected that in the very short term the number reaches about 170. Since this is an ongoing project, we hope that within 7 to 10 years, the region where ESCE-IPVC is based

will suffer a strong economic development, which, of course, has to be measured. It should be noted also that we have several incubators in our region, namely IN.CUBO (<http://incubo.eu/>) and BIENAL de CERVEIRA (<http://bionaldecerveira.org/>), extremely interested to receive students that have been graduated at ESCE-IPVC. Some of the projects developed under the “Leaders For The Future” initiative have obtained some results worthy of being mentioned in Poliempreende (<http://www.poliempreende.com/>). This is an initiative that aims, through a contest of ideas and business plans, to evaluate and reward projects developed and presented by students, graduates and teachers of the Portuguese Polytechnic Institutes, or others, from integrating teams of students and / or graduates.

As Alto Minho is a Portuguese border region, that shares many problems and characteristics with Galicia, in Spain, and also to foster unity and sharing of knowledge among different cultures, the Business School created, in the year of 2014, the first International Meeting of Young Entrepreneurs (IMYE, <http://eije.esce.ipvc.pt>). This event is to be repeated annually in different Iberian universities, and its main goal is to create a community of young entrepreneurs who share their knowledge and business ideas and also to promote future partnerships. In 2016, the third meeting will be held in Valença, the town where the Business School is located. Previously, the first meeting was held at the University of Santiago de Compostela and the venue of the second meeting was at the University of Coruña. It is composed by workshops, plenary lectures, poster sessions all related to the entrepreneurship field such as successful cases, financing of new ideas or entrepreneur experiences. Every year, the themes are chosen in accordance with the context and the economic situation of the moment. Due to the language proximity of both countries, the sessions are done in Portuguese or Spanish, depending of the speakers, allowing the language enrichment of students and professors.

The IMYE allows students to share their experience and to acknowledge different realities. In this meeting they listen to active economic players such as business people, investors and politicians that give them different perspectives on what is necessary to create new ventures. However, the main event is focused in the presentation and

discussion of the second year students business plans. The repercussion of the meeting starts even before it is held. The preparation for the presentation is, by itself, a major learning opportunity for students. With the help of a group of teachers, students develop a poster where they explore their business ideas through SWOT analysis. They also prepare a five minutes presentation that has to be presented, more than once, to the teachers and to their colleagues. During these training sessions they receive comments and suggestions to improve both the content and the presentation technics. In this meeting, a number of personalities from the business field, namely experts in entrepreneurship, enterprisers, and people from financial world are bringing together, in order to discuss/improve their business plan and to award the best business ideas from both countries. With this event, students have the opportunity to develop themselves in two different ways. Academically, they can improve their business plan taking into account the ideas from external people of academic field, such as fit better the target of the product/service, adjust the prices or the region where they might develop the business and study other ways of financing their businesses. Behaviourally, they have the opportunity to develop some skills and competencies that are crucial for successful entrepreneurship: skills related to person-to-person interactions, build a context of cooperation and trust, creating new useful contacts, persuasive abilities, communication and interpersonal skills.

In 2014, the “Leaders for the Future” project also won the most reputed European entrepreneurship award, the European Enterprise Promotion Awards ([http://ec.europa.eu/growth/smes/support/enterprise-promotion-awards/index\\_en.htm](http://ec.europa.eu/growth/smes/support/enterprise-promotion-awards/index_en.htm)) in the category “Investing in Entrepreneurial Skills”, within a universe of 53 candidate projects, considered nationally with extremely relevance. This is an initiative launched by the European Commission to distinguish best practices in promoting entrepreneurship in Europe. This award reflects the pioneering spirit and the uniqueness of the training project that was born at ESCE-IPVC, especially because this school is taking over as the first unit of HE in Portugal to encourage and teach students to work on their own and not on behalf of others.

## 5 Conclusions and Future Work

In countries such as Portugal, fostering and entrepreneurial culture at the HE level can have, in a medium term, a positive impact on economic development. The entrepreneurship education has been presented as an important pillar to support the entrepreneurs' mindset change needed to develop a set of skills-oriented to the promotion of new ventures, potentiation of current businesses, or even to strategically align the design of entrepreneurial organizations with the market opportunities.

This paper presents a project that is being developed at ESCE-IP-VC: "The Leaders For the Future". This project defines a process for teaching entrepreneurship to undergraduate students and is a powerful mean of competitiveness and economic improvement of the Alto Minho Region.

This project, surely, will make the difference and will start changing the paradigm of entrepreneurship training in our region and possibly in other European countries. The Leaders For the Future project allows that our Business School students improve and acquaint entrepreneurial skills. These skills will, then, allow the students to have and use the necessary tools to fight against unemployment of qualified young people, through self-employment or through partnerships.

As future work, to improve the results of the project and to accelerate the creation of new startups in our region, we plan to create a laboratory for entrepreneurship promotion and training that will allow students from other institutions and unemployed qualified people to acquaint the necessary entrepreneurship skills.

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